

REMARKS

Claims 1, 2, 4-10, 12-20, 22-27, 29-31, 39-41, and 43 are pending in the application. Claims 3, 11, 21, 28, 32-38, 42, and 44 were previously cancelled.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections and that they be withdrawn.

Rejections under 35 U.S.C. § 103

Claims 1-2, 4-5, 7-10, 12-14, 16-19, 22-26, and 29-31 were rejected under 35 U.S.C. § 103(a) as being allegedly anticipated by U.S. Patent No. 5,892,535 to Allen *et al.* ("Allen") in view of U.S. Patent No. 6,546,051 to Ramaswamy ("Ramaswamy"). Applicants respectfully traverse this rejection.

As admitted by the Office Action, Allen does not teach or suggest "a delay module coupled to the video input to delay a line of the uncompressed video signal," and "a subtraction module coupled to the delay module, wherein the subtraction module subtracts a subsequent line of the video signal from the delayed line of the video signal," as recited in claim 1.

Ramaswamy also does not teach or suggest the above features. Ramaswamy describes a video encoding apparatus that compresses an input video signal using a discrete cosine transform method (DCT). (Ramaswamy, Col. 3, lines 45-52). In Ramaswamy, DCT is performed "upon each 8x8 pel block of a video frame to generate 8x8 blocks of DCT coefficients that represent the frequency information contained in the original 8x8 pel block. The frequency information is typically concentrated in a few DCT coefficients" (Col. 3, lines 46-52). Thus, in Ramaswamy, a video signal is compressed by "quantizing [an] 8x8 DCT block" to cause "more of the DCT coefficients become equal to zero." (Col. 4, lines 1-2). "The greater the quantization value Q_{step} the fewer possible values to which the DCT coefficients may converge and the fewer number of bits needed to represent the 8x8 DCT block. Accordingly, by adjusting the quantization value Q_{step} , the quantizer 120 effectively controls the number of bits required to represent the video signal. (Col. 4, lines 4-10).

As shown in FIG. 1 Ramaswamy, summer 117 receives an input from buffer 112 and from a motion compensation unit 130, which receives its input from a DCT unit 118, a quantizer 120, an inverse quantizer 126, and inverse DCT unit 128. These components deal with the

quantization of an 8x8 pel block to generate DCT coefficients. Thus summer 117 is not configured to “subtract a subsequent line of the video signal from the delayed line of the video signal,” as recited in claim 1. Nowhere does Ramaswamy teach or suggest that summer 117 performs such a function. To better understand this function, Applicants respectfully direct the Examiner’s attention to FIGs. 9-10 and paragraphs [0048]-[0049] of the specification of the published application (Pub. No. 2002/0095681). Accordingly, claim 1 is patentable over Allen and Ramaswamy, considered alone or in combination.

Independent claims 9, 18, 25, and 39 also recite similarly distinguishing feature as distinguished above with respect to claim 1. Accordingly, claims 9, 18, 25, and 39 are also patentable over Allen and Ramaswamy, considered alone or in combination. Claims 2, 4-8, 10, 12-17, 19, 20, 22-24, 26, 27, and 29-31 depend from one of independent claims 1, 9, 18, 25, and 39. They are thus patentable over Allen and Ramaswamy, considered alone or in combination, for at least the reasons provided above and further view of their own distinguishing features. Applicants therefore respectfully request that the Examiner reconsider and withdraw the rejection of these claims.

CONCLUSION

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 18-1953 referencing Docket No. 16LN-133588. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

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